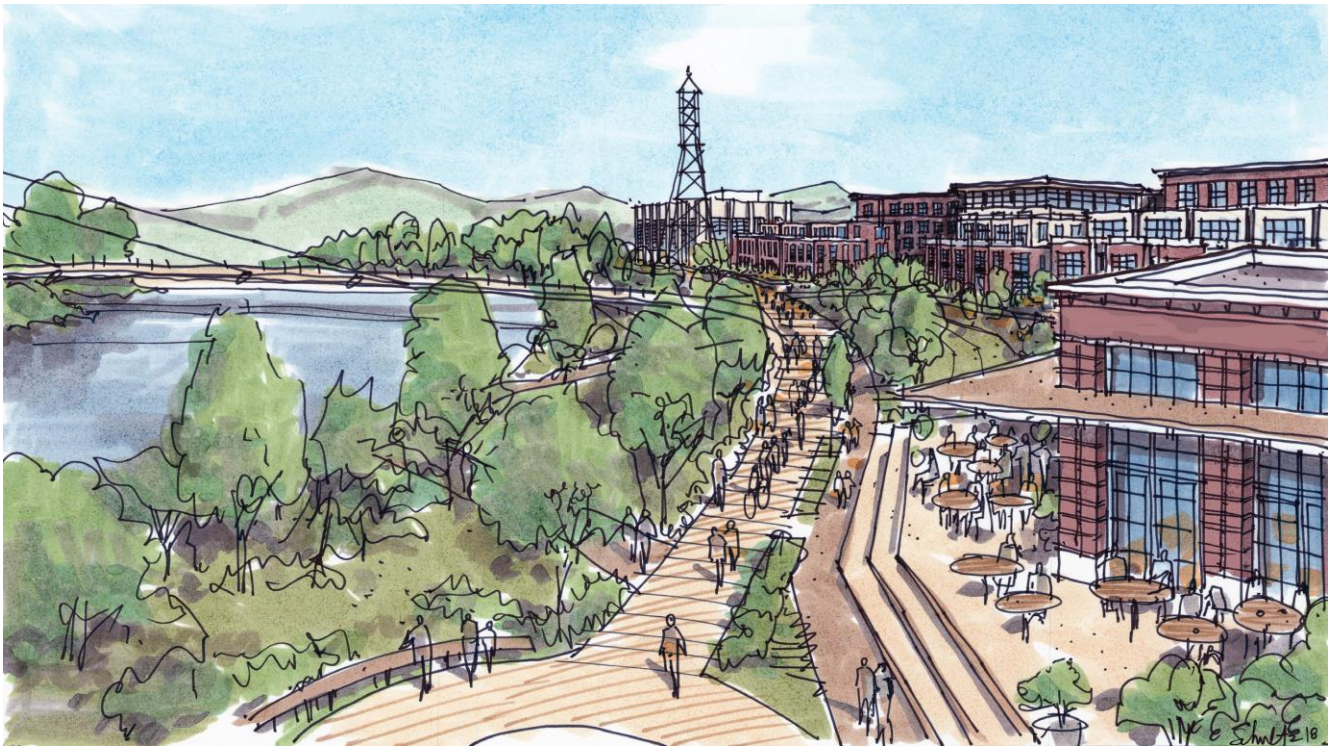
ATTACHMENT H

Cost-Benefit Analysis: Redeveloping the Downtown Riverfront Site



Updated July 3, 2018

City of Eugene • 99 W. 10th Ave. • Eugene, OR 97401 • 541-682-5443 • 541-682-5572 Fax
www.eugene-or.gov

Table of Contents

1 Executive Summary

This report's primary purpose is to help the City of Eugene's Urban Renewal Agency (Agency) understand the long-term impacts of redeveloping the Downtown Riverfront site in partnership with Williams/Dame & Associates (WDA). The analysis assumes the redevelopment will be consistent with the WDA concept plan, as presented to the Agency Board on January 31, 2018, and the estimated costs of public infrastructure and private construction based on the proposed terms presented to the Agency Board on May 29, 2018.

The costs of the development fall into three broad categories:

- City and the Agency's direct costs associated with the overall site redevelopment is about $12.2 million. These investments fund the purchase of property (Steam Plant, roads, commercial parcels, and plaza) and basic infrastructure (roads and utilities) to serve the Downtown Riverfront neighborhood.
- City and the Agency's direct costs for community assets (investments that will be made independent of the proposed WDA redevelopment) about $13.7 million. These investments include the 4-acre park and plaza and the Quiet Zone.
- Direct costs borne by WDA, about $112.8 million. The investments include the construction of new buildings, the land, and the proportional share of basic infrastructure to serve the redevelopment.

1.1 Fiscal impacts

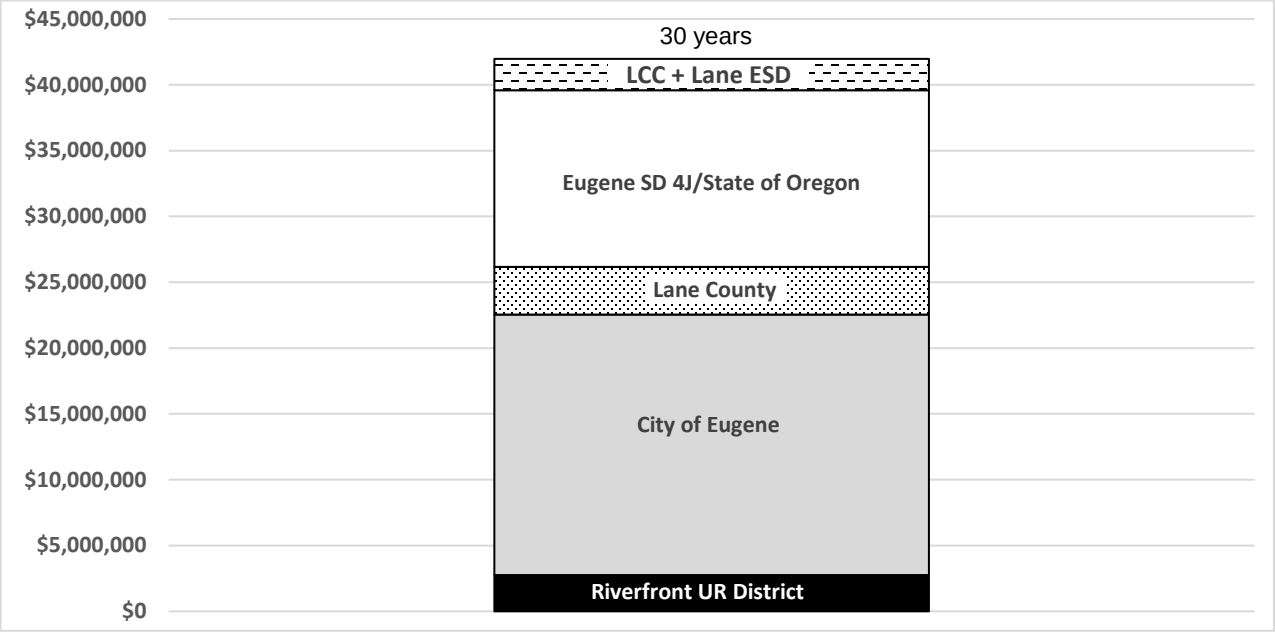
The site is currently in public ownership and generates almost no property tax revenue. The land in private ownership and new construction is expected to create about $74 million in new assessed value to the community. The new private development on the site will generate property taxes over the long term that will benefit the affected taxing districts, including the City of Eugene, Lane County, and Lane Community College. Although the new private development will also generate additional property taxes for School District 4J and Lane Education Service District (ESD), the net impact on these schools will likely be minimal due to the State of Oregon's school funding formula.

To estimate tax revenue over time, the model assumes that from 2021 to 2023, land and new buildings (hotel, townhomes, and commercial) come onto the tax rolls. The model also incorporates a 10-year Multi-Unit Property Tax Exemption (MUPTE) for the three multi-family rental properties (the land under those buildings will generate tax revenue). The value of the tax exemption is estimated to be a total of $4.7 million for the 10-year period.

The model estimates tax revenue of the Riverfront Urban Renewal District (District) through 2024, the year the District is scheduled to sunset. It estimates revenue to overlapping taxing districts from 2025 to 2049, a 30-year period.

- In 2024, the redevelopment is expected to generate about $900,000 to the District.
- In 2025, after the District sunsets, the redevelopment will generate $390,000 to the City of Eugene and $70,000 to Lane County.
- By 2033, all three MUPTEs have expired and the redevelopment will generate $740,000 to the City of Eugene (of which $230,000 is generated by the multi-family rental properties) and $130,000 to Lane County.

Figure 1. Estimated Cumulative Tax Revenue from Local District's Permanent Tax Rates New Assessed Value by 2049



Tax revenue from new assessed value generated by the permanent tax rates for School District 4J and Lane ESD is largely an impact on the State's budget because K-12 schools are mainly funded on a per-pupil funding formula (rather than by the level of property tax dollars generated within their boundaries). The State determines how much money must be allocated for the education of each pupil across the state. If more funds are available through local school property taxes, the State would have additional dollars to allocate as it chooses. In other words, the State can choose to allocate any extra money to education or to some other budgetary priority. If the State chooses to keep the money in education, some of that money would return to Eugene schools based on the applicable statewide school funding formula and the rest would be distributed to school districts across Oregon. Staff estimate that the new development will generate about $270,000 in 2025 and $500,000 in 2033 resulting from Eugene School District 4J's permanent tax rate.

Figure 1 shows that from 2019 to 2049, the new development will have generated about $42 million in property taxes to the District, the City, Lane County, School District 4J, LCC, and Lane ESD combined. The District will have collected about $2.8 million from the new development by the time the District sunsets in 2024. From 2025 through 2049, permanent tax rates for local districts will generate the following amounts:

- The City of Eugene will have collected about $19.8 million.
- Lane County will have collected about $3.6 million.
- School District 4J will have collected about $13.4 million.
- LCC and Lane ESD will have collected about $2.4 million.

1.2 Non-fiscal impacts

To describe the non-fiscal impacts, staff relied on the Triple Bottom Line (TBL) framework to help consider the social equity, environmental health, and economic prosperity impacts associated with redeveloping the Downtown Riverfront site. The non-fiscal impacts of the WDA concept plan have many positive elements and limited downside consequences. The following are the key findings of the TBL analysis:

- *Benefits of development without displacement.* With the history of industrial uses on the site, new development will not push out vulnerable populations. Instead, it will contribute jobs and housing for a variety of income levels, including affordable housing for low-income households.
- *Creation of a 20-minute neighborhood.* The mixed-use character of the development, along with the street improvements, park, and proximity to downtown, will establish a new neighborhood with greater connectivity and opportunities for auto-free travel and lifestyle.
- *Multiple economic benefits from a showcase destination development.* The project promises a variety of economic benefits, both in the short and long term, including jobs, tourism, retail, and other commercial activity. These will contribute to the growing economic vitality of Eugene's downtown.
- *Significant addition to cultural identity and place-making.* The project location and design embraces the city's relationship to the Willamette River and creates an inviting, accessible shared space that can be a source of civic pride and identity.
- *Environmental benefits of contaminated-site restoration.* Development of the site will address contamination from historic practices, enhance stormwater treatment, and restore the site to a productive and safe use. In addition the development of the park will improve riverbank riparian habitat conditions and provide new greenspace, trees, and stormwater treatment on a previously industrialized site.

The planned development helps the City meet many of the goals articulated in *Envision Eugene*:

- Promote compact urban development and efficient transportation options.
    - Integrate new development and redevelopment in the downtown, in key transit corridors and in core commercial areas.
    - Meet the 20-year multi-family housing need within the existing Urban Growth Boundary.
    - Make compact urban development easier in the downtown, on key transit corridors, and in core commercial areas.
- Provide housing affordable to all income levels.
- Protect, repair, and enhance neighborhood livability.
- Protect, restore, and enhance natural resources.

Table 1 on the next page summarizes the different impacts within the TBL framework (please see full report for more detailed description of the impacts). The analysis shows that almost all impacts are positive, with very few negative impacts. This positive assessment largely results from the fact that the analysis compares the redevelopment to the site's current condition. The site is currently a mostly paved vacant site with contaminated soil. The riparian area is in poor condition. Redeveloping the site will improve environmental conditions from the current state and create a new compact neighborhood within walking distance to services and the downtown and the University of Oregon, two major employment centers.

Table 1. Summary of Social Equity, Environmental Health, and Economic Prosperity Impacts

Investment	Description	Social Equity	Environmental Health	Economic Prosperity
Overall development of Downtown Riverfront Site	$100 million of private investment in new residential, commercial structures, and privately owned open space under the viaduct available to the public.	+ Improve community access to the river + Enhance culture and education at the river + Improve connectivity for all transportation modes + Expand housing and employment opportunities + Complement downtown revitalization + Enhance residents' recreational opportunities	– Increase energy and materials use during construction + Decrease average miles driven, carbon emissions, and other auto-oriented pollutants + Reduce and treat stormwater runoff + Remediate industrial contamination + Create a compact urban form	+ Create about 1,260 direct and secondary jobs and associated income during construction period; creates long-term jobs at hotel and other commercial spaces + Enhance tourism and transient room tax revenues + Create cost efficiencies for urban services
Downtown Riverfront Park	Design and construct a 4-acre City-owned park on Willamette River.	+ Enhance residents' recreational opportunities + Improve access to Willamette River + Contribute to community cohesion + Positive effect on health	– Increase energy and materials use during construction + Reduce and treat stormwater runoff + Reduce energy consumption + Enhance habitat in riparian area + Positive effect on air quality	- Increase costs for security and maintenance + Create about 110 jobs and associated income during construction period + Increase property values + Enhance tourism and transient room tax revenues
Bike Path	Design and improve Bike Path throughout Downtown Riverfront site.	+ Improve connectivity and access to riverfront and downtown core + Increase opportunities to improve health	– Increase energy and materials use during construction + Decrease average miles driven, carbon emissions, and other auto-oriented pollutants	+ Create about 10 jobs and associated income for every $1 million of path construction expenditure during construction period + Increase exposure to retail businesses
Quiet Zone	Enhance safety at RR crossings to meet federal standards to eliminate train horn noise (which has a minimum of 96 decibels). Project includes 10 crossings: 8th Avenue, High Street, Pearl Street, and 7 additional crossings west of the Downtown Riverfront site.	+ Increase safety at railroad crossings + Improve access to riverfront site + Diminish noise + Improve health + Addresses HUD requirements for noise levels adjacent to affordable housing in and around the Downtown Riverfront site	– Increase energy and materials use during construction + Implement management of contaminated MGP site	+ Create about 35 jobs and associated income during construction period + Provide essential access to riverfront site (8th Avenue crossing and roundabout) + Reduce construction costs of development
Enhanced Pedestrian Environment	Improvements to streets above basic street requirements.	+ Enhance the public experience + Positive effect on health	+ Reduce and treat stormwater runoff + Reduce energy consumption + Positive effect on air quality	+ Enhance financial viability of the development overall
Historic Preservation of Steam Plant	Seismic upgrades and other repairs of Steam Plant.	+ Enhance cultural identity	+ Conserve existing resources	– Cost of rehabilitation may exceed economic value of the structures
Affordable Housing	New housing in the District that is specifically targeted to low income households.	+ Increase location choices for low-income households + Reduce dependency on automobiles + Reduce commute times + Provide access to goods and services + Improved standard of living positively affects health	– Increase energy and materials use during construction + Decrease average miles driven, carbon emissions, and other auto-oriented pollutants	+ Create about 15 jobs and associated income for every $1 million of multi-family construction expenditure during construction period + Increase consumption spending + / - Varying impact on property values

2 Framework

This report's primary purpose is to help the Agency understand the long-term impacts of redeveloping the Downtown Riverfront site in partnership with WDA. The analysis assumes the redevelopment will be consistent with the WDA concept plan, as presented to the Agency Board on January 31, 2018, and the estimated costs of public infrastructure and private construction based on the proposed terms presented to the Agency Board on May 29, 2018. The Agency Board is scheduled to hold a public hearing June 25 and work session on July 9 for the proposed terms.

The analysis estimates the costs and benefits in the short and long term. To estimate the net impacts of redeveloping the site, the costs and benefits of one possible future must be compared to the costs and benefits that would occur in a different future. This analysis compares a future based on redeveloping the Downtown Riverfront site in accordance with the conceptual site plan developed by WDA to a future where no redevelopment occurs.

2.1 Description of the development

This cost-benefit analysis is based on the conceptual site plan for a Downtown Riverfront neighborhood developed by WDA with SERA Architects and the proposed terms presented to the Agency Board on May 29, 2018. At this time, WDA wants to purchase or lease 8.98 acres from the Agency. They intend to construct a mix of building use types:

- 70 townhouses
- 215 multi-family units
- 125-room hotel
- 14,000 square feet of commercial space
- 0.32-acre viaduct open space, privately owned and publicly accessible
- Restaurant and commercial space (on leased land)

The restaurant and commercial space will be on land owned by the City or the Agency, and leased to WDA to construct a privately owned building on the sites.

The analysis also takes into account impacts associated with development that will not be owned by WDA:

- 4-acre Riverfront Park (includes a 1-acre plaza)
- 75 to 90-unit (estimated) affordable housing building
- Steam Plant

The Riverfront Park will be owned and managed as a component of the City's park system.

3 Costs

The analysis includes two types of direct costs borne by the City and the Agency: those investments that primarily will benefit the Downtown Riverfront neighborhood, including the hotel, restaurants, and residences; and investments in the site to develop community assets, including the park, affordable housing, the Steam Plant, and the Quiet Zone, which will be made independent of the proposed WDA redevelopment.

The table and figure below show the following:

- City and the Agency's direct costs associated with the private investment in new construction, about $12.2 million. These investments fund the purchase of property (Steam Plant, roads, commercial parcels, and plaza) and basic infrastructure (roads and utilities) to serve the Downtown Riverfront neighborhood.
- City and the Agency's direct costs for community assets, investments that will be made independent of the proposed WDA redevelopment, about $13.7 million. These investments include the 4-acre park/plaza and the Quiet Zone.
- Direct costs borne by WDA, about $112.8 million. The investments include the construction of new buildings, the land, and the proportional share of basic infrastructure to serve the redevelopment.

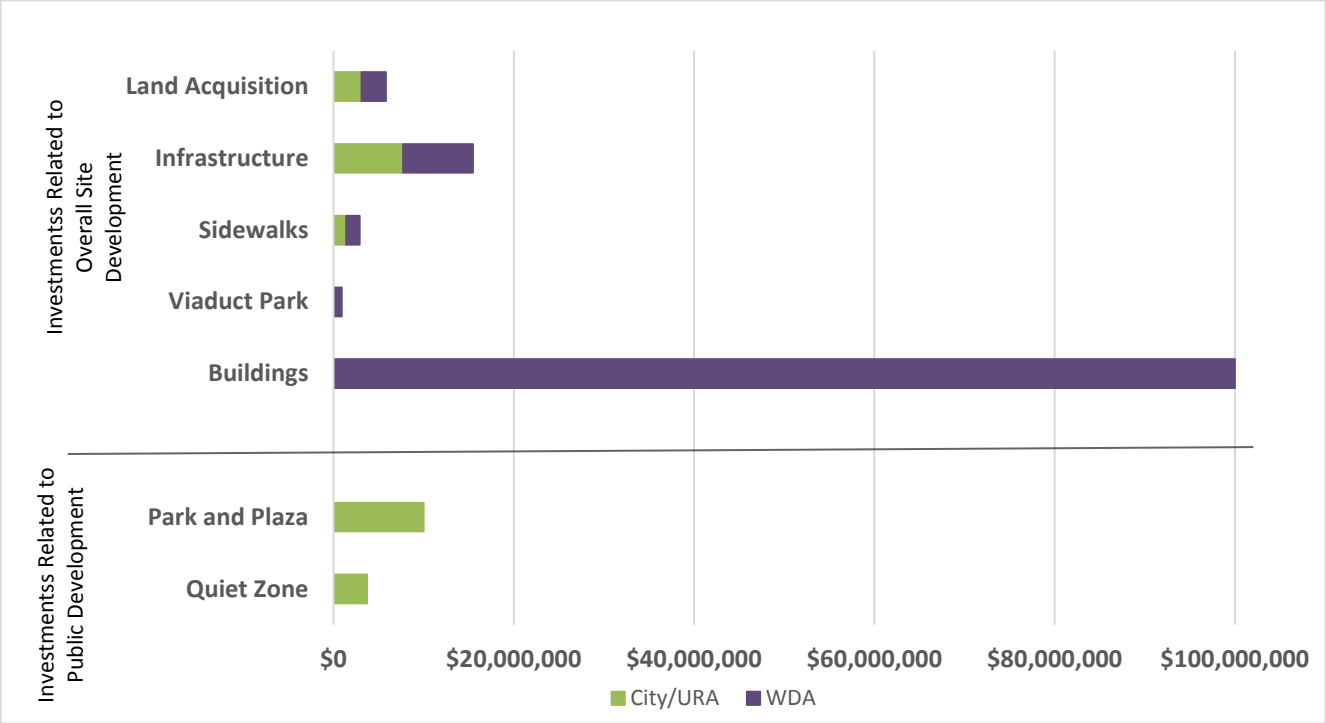
Table 2. Summary of Estimated Public and Private Investment

	City/URA Investment	WDA Investment	Total
Investments Related to Overall Site Development			
Land Acquisition	$3,100,000	$2,700,000	$5,800,000
Infrastructure*	$7,725,000	$7,725,000	$15,450,000
Sidewalks*	$1,400,000	$1,500,000	$2,900,000
Viaduct Park*	$0	$900,000	$900,000
Sub-total	$12,225,000	$12,825,000	$25,050,000
Investments Related to Private Development			
Buildings*	$0	$100,000,000	$100,000,000
Sub-total	$0	$100,000,000	$100,000,000
Investments Related to Public Development			
Park*	$10,000,000	$0	$10,000,000
Quiet Zone	$3,700,000	$0	$3,700,000
Sub-total	$13,700,000	$0	$13,700,000
Total Investment	**$25,925,000**	**$112,825,000**	**$138,750,000**

* Preliminary Estimate

Total costs borne by the City/Agency are about $25.9 million. Over half of those costs are investments in infrastructure that will benefit the community at large, including the park itself and utilities and streets needed to serve and access the park. The portion related to the overall site development are those investments that will leverage private investment from WDA into the redevelopment site, as well as investment in the Steam Plant and the affordable housing project.

Figure 2. Summary of Estimated Public and Private Investment



WDA's land acquisition proposed price ($7.95 per square or $2.7 million) is based on the value for unimproved land that the Agency paid to purchase it from the Eugene Water and Electric Board (EWEB) in April. The City/Agency land acquisition cost of $3.1 million was spent from Agency funds in April 2018 and is for the Steam Plant, the 1-acre plaza that will be added to the park, lots 6 and 8 that are to be ground leased for commercial use, and the streets, which will remain publicly owned.

The City's investments will also support development of the affordable housing building and the redevelopment of the Steam Plant. The Agency's purchase of the land from EWEB was the primary investment made by the Agency in support of those projects.

4 Fiscal Impacts

Redeveloping the site will have direct fiscal impacts to the Agency and the City. The revenues include property tax revenue, Transient Room Tax revenue, and parking revenue from on-street spaces.

4.1 Property Taxes

The site has been owned by EWEB for decades. As a public agency, EWEB does not pay property taxes on its real property, thus the site has generated almost no property tax revenue. The parcel at the southeast corner of 4th Avenue and High Street is leased by a private party, and that parcel had a taxable value of $1.0 million in 2017. This analysis calculates the property tax revenue generated by converting the land WDA wants to acquire and lease to private ownership and the development of new construction at the site.

Property tax revenue in Oregon is determined by multiplying the property tax rate for a taxing district by a property's assessed value. In Oregon, "assessed value" is not directly tied to a property's appraised real market value. To calculate the assessed value, the "changed property ratio" is applied to the appraised real market value. The changed property ratio is the average percentage difference of like properties (single-family residential, multi-family residential, commercial) between real market value and assessed value, as calculated and reported by the County Assessor.

The Downtown Riverfront site lies in the Riverfront Urban Renewal District (District), which collects tax revenue from the overlapping taxing districts (including City of Eugene, Lane County, School District 4J, Lane Community College, and Lane Educational Service District) on new assessed value (known as "increment") that is added to the tax rolls during the existence of the District. At this site, the increment associated with the redevelopment includes the land and new construction.

To estimate the assessed value of the improved land, staff relied on data from the Lane County Assessor. Nearby properties directly to the north of the site have an average real market value of $1.32 million per acre. Staff applied this figure to the 8.98 acres the WDA wants to purchase or ground lease. Staff evenly split the WDA acreage into three uses: single-family residential, multi-family residential, commercial. The even split across the uses is a rough estimate of how the land will be used as it is developed, based on WDA's proposed concept. The analysis does not include the two parcels that WDA wants to remain in public ownership, and the development will lease the ground from the Agency.

Staff then applied the appropriate changed property ratio for each use to calculate the assessed value. Table 3 below shows the acres and estimated real market and assessed values of the improved land only.

Table 3. Estimate of New Assessed Value: Improved Land Only

	Acres*	Real Market Value	Changed Property Ratio	Assessed Value
Townhouses-Land	3.0	$3,954,000	0.739	$2,922,000
Multi-Family-Land	3.0	$3,954,000	0.592	$2,341,000
Hotel/Commercial-Land	3.0	$3,954,000	0.659	$2,606,000
Total Land	**9.0**	**$11,862,000**		**$7,869,000**

For the new buildings, staff used the estimated value of construction by use, as provided by WDA, to estimate the real market value. Staff then applied the appropriate changed property ratio for each use to calculate the assessed value. Table 4 below shows the different building types, their estimated real market and assessed values. This likely underestimates the assessed value, as it is based on the estimated cost of construction, and not the actual real market value when the structures come onto the tax rolls.

Table 4. Estimate of New Assessed Value: New Construction

	Real Market Value	Changed Property Ratio	Assessed Value
Townhouses-New Construction	$38,570,000	0.739	$28,503,000
Multi-Family-New Construction	$40,805,000	0.592	$24,157,000
Hotel/Commercial-New Construction	$20,625,000	0.659	$13,592,000
Total New Construction	**$100,000,000**		**$66,252,000**

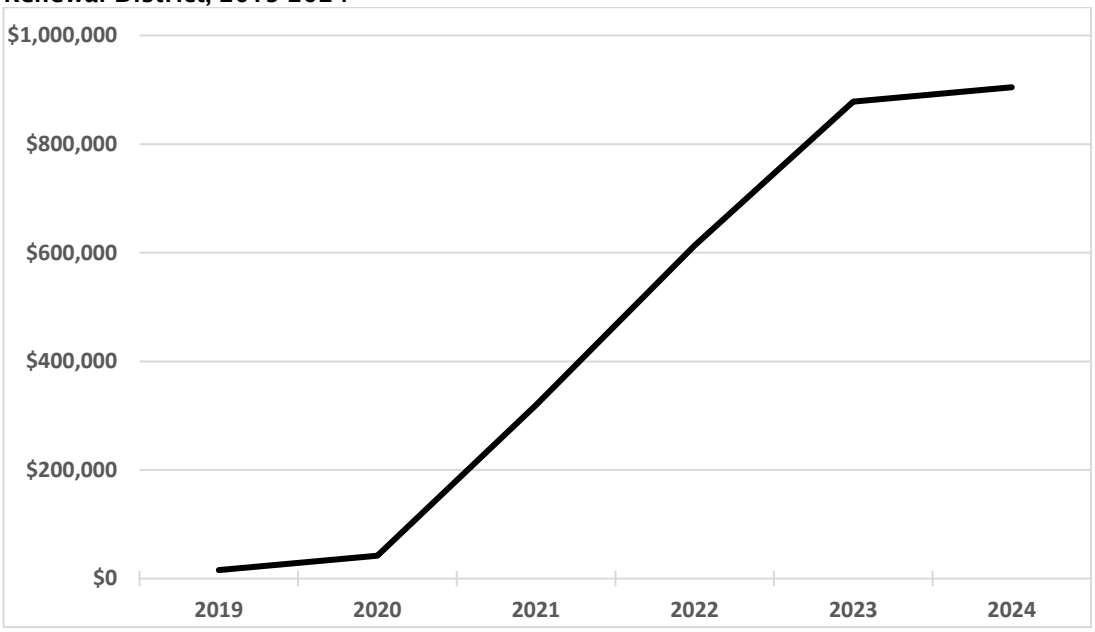
To calculate tax revenue, staff assumed the new assessed value associated with new construction will come on the tax rolls over a three-year period, from 2021 to 2023. Staff evenly split the new value over that three-year period, so that one-third becomes taxable in 2021, the next third in 2022, and the final third in 2023. The land comes on the tax rolls one year in advance of construction. Assessed value can increase by 3% per year, as allowed by Oregon state law.

The estimate of new assessed value does not include the Steam Plant redevelopment nor the parcel reserved for an affordable housing development.

The estimate of tax revenue does not include tax revenue associated with the value of the three multi-family buildings in their first 10 years, to account for the 10-year Multi-Unit Property Tax Exemption (MUPTE). WDA has stated it will pursue a MUPTE on the three eligible multi-family properties, which is subject to City Council approval.

The District currently generates $16.6152 per $1,000 of assessed value. Staff calculated the annual revenue generated by the Downtown Riverfront redevelopment, shown below in Figure 3.[1] The Figure shows the total revenue generated by the tax rates that are currently directed to the Riverfront UR District.

Figure 3. Estimated Annual Tax Revenue from New Assessed Value, Riverfront Urban Renewal District, 2019-2024



Note: Tax revenues are based on an assumed collection rate of 94%.

Figure 3 shows that the area generates almost no property tax revenue in 2019. The vacant land is primarily in public ownership which does not generate tax revenue. If the site is not developed, it will continue to generate almost no property tax revenue.

In 2020, about one-third of the land would transfer to in private ownership, generating about $40,000 of new tax revenue. In 2024, the redevelopment is expected to generate about $900,000 to the District. The total tax revenue is affected by three key assumptions:

- From 2021 to 2023, land and new buildings come onto the tax rolls.[2]
- The three multi-family rental properties would be exempt from property taxes, assuming they would receive a MUPTE (but the land under those buildings will generate tax revenue). The analysis assumes one multi-family building is built per year from 2020 to 2023, each building is exempt for 10 years, and the three multi-family buildings come onto the tax rolls from 2030 to 2033. For this analysis, the value of the tax exemption is estimated to be a total of $4.7 million for the 10-year period.

[1] Staff applied an assumed collection rate for property taxes of 94% to calculate estimate tax revenues.

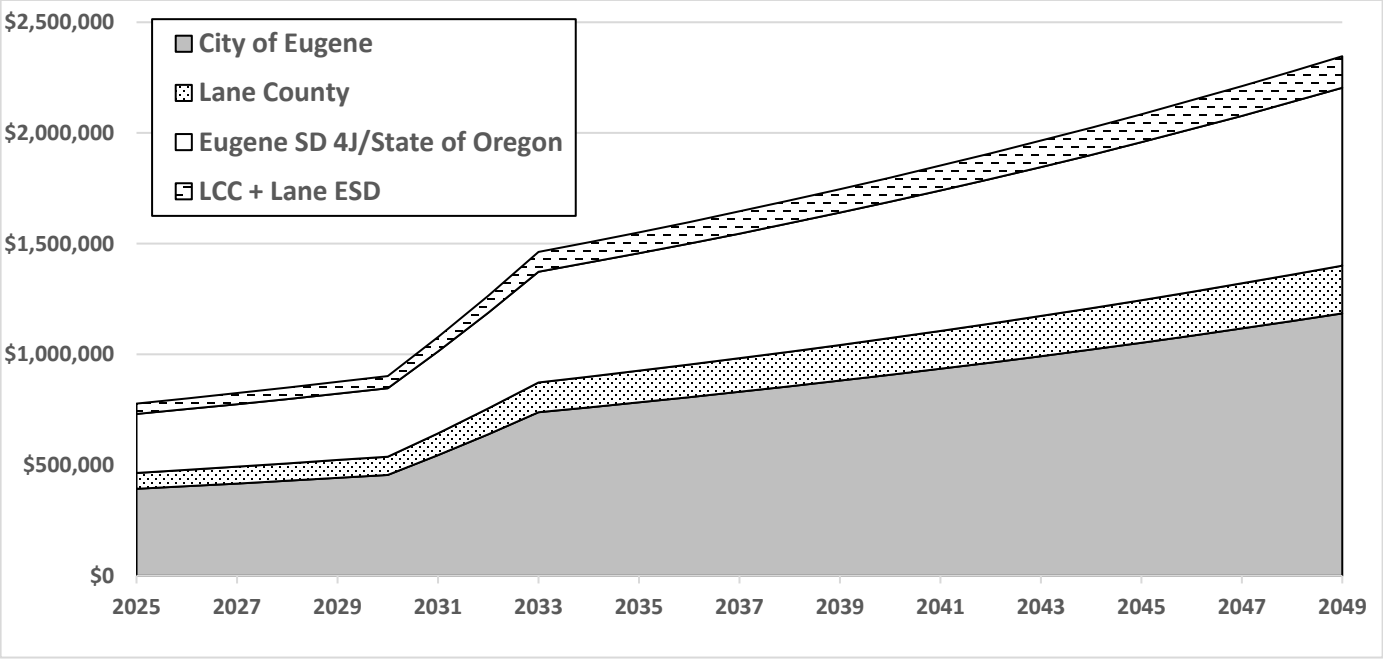
[2] The analysis estimates tax revenue per year and does not distinguish between calendar and fiscal year. The timing of the land purchase and construction completion dates can affect the tax value in its first year of being on the tax rolls. This analysis does not attempt to estimate values at such a precise level of detail.

- Assessed value increases 3% per year, as allowed under Oregon state law.

Figure 4 shows annual tax revenue to the City of Eugene, Lane County, Eugene School District 4, LCC, and Lane ESD after 2024 (when the District is scheduled to sunset). The tax revenue in Figure 4 is generated from each local district's permanent tax rate.

- In 2025, after the District sunsets, the redevelopment will generate $390,000 to the City of Eugene and $70,000 to Lane County.
- By 2033, all three MUPTEs have expired and the redevelopment will generate $740,000 to the City of Eugene (of which $230,000 is generated by the multi-family rental properties) and $130,000 to Lane County.
- Tax revenue from new assessed value generated by the permanent tax rates for School District 4J and Lane ESD is largely an impact on the State's budget because K-12 schools are mainly funded on a per-pupil funding formula (rather than by the level of property tax dollars generated within their boundaries). The State determines how much money must be allocated for the education of each pupil across the state. If more funds are available through local school property taxes, the State would have additional dollars to allocate as it chooses. In other words, the State can choose to allocate any extra money to education or to some other budgetary priority. If the State chooses to keep the money in education, some of that money would return to Eugene schools based on the applicable statewide school funding formula and the rest would be distributed to school districts across Oregon. Staff estimate that the new development will generate about $270,000 in 2025 and $500,000 in 2033 resulting from Eugene School District 4J's permanent tax rate.

Figure 4. Estimated Annual Tax Revenue to Local Districts' Permanent Tax Rates from New Assessed Value, 2025-2049

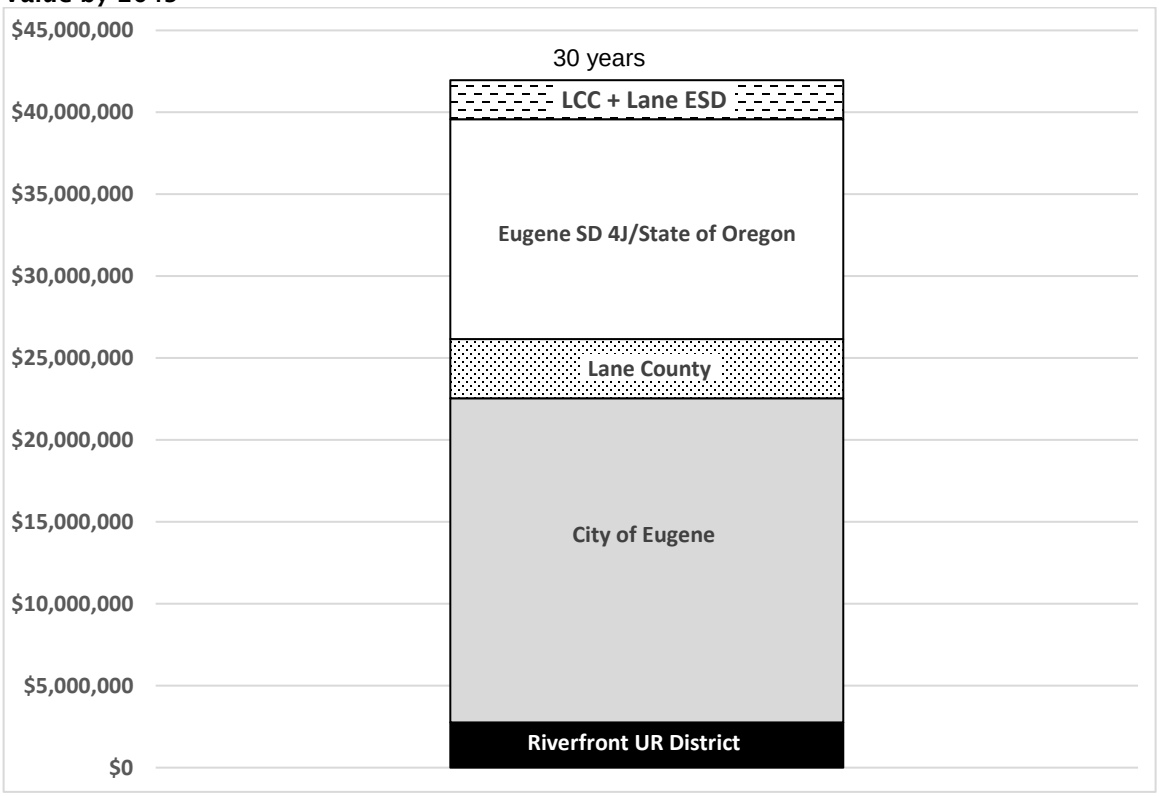


Note: Tax revenues are based on an assumed collection rate of 94%.

Figure 5 shows that from 2019 to 2049, the new development will have generated about $42 million in property taxes to the District, the City, Lane County, School District 4J, LCC, and Lane ESD combined. The District will have collected about $2.8 million from the new development by the time the District sunsets in 2024. From 2025 through 2049, permanent tax rates for local districts will generate the following amounts:

- The City of Eugene will have collected about $19.8 million.
- Lane County will have collected about $3.6 million.
- School District 4J will have collected about $13.4 million.[3]
- LCC and Lane ESD will have collected about $2.4 million.

Figure 5. Estimated Cumulative Tax Revenue from Local District's Permanent Tax Rates New Assessed Value by 2049



Note: Tax revenues are based on an assumed collection rate of 94%.

The new development will also generate tax revenue to General Obligation bonds and Local Option levies. The estimated revenue shown in Figure 4 and Figure 5 do not include the revenue directed to those levies.

[3] Tax revenue from new assessed value generated by the permanent tax rates for School District 4J and Lane ESD is largely an impact on the State's budget, because K-12 schools are mainly funded on a per-pupil funding formula (rather than by the level of property tax dollars generated within their boundaries). The State determines how much money must be allocated for the education of each pupil across the state. If more funds are available through local school property taxes, the State would have additional dollars to allocate as it chooses.

- Tax revenue directed to General Obligation bonds will help pay the annual levied amount. New tax revenue will reduce the tax burden borne by other properties in affected taxing districts.
- Local Option levies are short term and will expire within a few years.

4.2 Revenue-Parking

The redevelopment will include about 200 on-street parking spaces. An on-street space generates about $2,000 per year in gross revenue and costs about $200 per year to patrol. The net annual revenue will be approximately $1,800 per space, or $360,000 per year in total parking revenue on the redeveloped site. Parking revenues support the City's parking program and on-going maintenance of structured parking facilities.

4.3 Revenue-Transient Room Taxes

The City of Eugene imposes a 4.5% Transient Room Tax (TRT) on all overnight stays in the city. The WDA redevelopment plan will increase TRT revenues in two ways.

The WDA redevelopment plan includes a 125-room hotel, which will directly generate TRT revenue. The actual TRT generated by the hotel depends on price per room and occupancy rates. At this time, staff do not have information about expected room rates. Travel Lane County provided data regarding the average revenue per available room in Eugene. The average revenue per available room in Eugene in 2017 (through October) was $81.92. Applying this figure to the 125 rooms at the planned hotel, the hotel would generate $3.7 million in annual gross revenue, yielding about $169,000 per year in TRT. However, it is important to note that the planned hotel is unlikely to increase total TRT by that amount. Travel Lane County reports that the existing hotel-room supply is inadequate for some parts of the year. This hotel will expand supply and increase the overall availability of hotel rooms. The new hotel will likely take some of the existing market share; some of the TRT generated by existing hotels will simply shift to the new hotel. It is beyond the scope of this study to calculate the portion of the new hotel's revenue that will be actual growth in demand.

The development on the riverfront site will contribute to the community's overall identity as a visitor destination in a positive way. It will enhance the appeal of the Eugene area for tourism. The site's proximity to major athletic venues, including Autzen Stadium and Hayward Field, make it an obvious destination for visitors attending athletic events. The improved access for all transportation modes will ensure that the park and potential restaurants and retail will attract the visitors before and after the athletic events, enhancing the visitor experience and generate increased business sales. To the degree that the Eugene area increases its appeal as a visitor destination, hotel revenue will increase, which will in turn yield increased revenues from the TRT.

5 Other impacts

To describe the non-fiscal impacts, staff relied on the Triple Bottom Line (TBL) framework to help consider the social equity, environmental health, and economic prosperity impacts associated with redeveloping the Downtown Riverfront site. Public investments in the area will affect the long-term outcome of the development and the TBL impacts analysis will help the Agency understand the short-term and long-term implications of potential investments.

This section describes the impacts of development of the site as a whole. Staff also assess the impacts for the following specific elements of the redevelopment:

- Riverfront Park and Plaza

- Bike path
- Quiet Zone
- Enhanced streets and sidewalks
- Historic preservation of Steam Plant
- Affordable housing

5.1 Overall Development of Downtown Riverfront Site

This section describes the impacts associated with the overall development of the site. It is the combination of private investment with multiple public investments that will create a new riverfront neighborhood as a result of both public and private investments. After this section, staff describe the impacts that can be tied to specific public investments.

The new development will be part of a '20-minute neighborhood', a place where residents have easy, convenient access to many of the places and services they use daily including grocery stores, restaurants, and parks, without relying heavily on a car. As described by the City of Eugene's Office of Sustainability, 20-minute neighborhoods are characterized by a vibrant mix of commercial and residential uses all within an easy walk. They have higher concentrations of people and are complete with the sidewalks, bike lanes and bus routes that support a variety of transportation options. They are an important strategy for reducing reliance on the automobile, lowering transportation costs, and reducing our community's greenhouse gas emissions. In addition, walkable neighborhoods improve public health, help residents save money as they spend less on driving, and improve access to daily needs.

The development also plays a significant role in place-making. As described in a TBL tool for economic development, place-making:

> …creates inviting and distinctive spaces where people want to live, work and play. Place-making can contribute to the financial bottom line through increased property value, tourism receipts and firm recruitment and retention…Preserving and enhancing cultural and historic resources can contribute to economic vitality. In addition, community well-being may be improved if these resources contribute to civic pride, a sense of identity and connection, and well-utilized public spaces[4].

Social Equity – Overall

Improve community access to the river

As described in the *EWEB Riverfront Master Plan*, over 20 years of planning documents and community efforts have identified the Downtown Riverfront site as the place where the city should meet the river. An investment in the park, bike path, and streets will create new access to the Willamette River in the city center, creating recreational and health benefits for the public that are both immediate and long lasting. The Eugene community places significant value on the ability to access neighborhood parks, open space, and nearby nature to bicycle, walk, attend events, eat lunch, and experience the river. A newly created riverfront park is expected to attract hundreds of visitors per day, providing health, well-being, and quality of life benefits for the community. Staff describe benefits specifically associated with the riverfront park in the section below.

[4] Hammer, J., G. Pivo, I. Goldstein, and M. McCullough. *The Triple Bottom Line for Economic Development: A Practitioner's Guide*. US Economic Development Administration. January 2015.

Enhance culture and education at the river

The redevelopment site is the only property within the *Eugene Downtown Plan* area that is immediately adjacent to the river, and can serve as the community's living classroom for local history and rich natural habitat. For over 100 years, the EWEB operations facility and the former Agripac industrial use have been an obstacle to the community's access to the river from downtown. For decades, the community's vision for the riverfront focused on creating a place where residents and visitors come to live, work, recreate, attend cultural and educational events, and reinforce civic identity and local pride. Creating an accessible neighborhood along the Willamette River will enhance Eugene's civic identity as a city on the river. The *EWEB Riverfront Master Plan* identifies the open space along the river as a place to teach and inspire inquiry into the community's history, in a variety of ways and at a variety of scales.

Improve connectivity for all transportation modes

The transportation improvements include an improved bike path with good connectivity to the downtown core, a street-grade railroad crossing and roundabout on 8th Avenue, and an extension of 5th Avenue into the redevelopment site. The new roads and paths will enable access to the new development, the new park, and the Willamette River. Constructing the new transportation routes are consistent with concurrent planning efforts, including the *Climate & Energy Action Plan* and the *Willamette Open Space Visioning Project*.

Expand housing and employment opportunities

The urban development in the redevelopment site will create opportunities for households to live within walking distance to the Willamette River, the downtown core, and the University of Oregon. The development plan includes affordable and market-rate housing, so households across the income spectrum will have housing choices in the area, helping to achieve the Envision Eugene goal of providing housing affordable for all. The development plan includes almost 400 new housing units, including 75-90 units of Affordable housing, which helps the City achieve its stated Envision Eugene goal of increasing the number of housing units in the downtown core by 1,000 units. The site will offer proximity to employment centers, retail goods and services, views of the river, and recreational activities that are not currently available in Eugene.

Complement downtown revitalization

Most of the planned development will be housing. The new housing will increase the number of people living within walking distance to the downtown, which will complement existing commercial activity, thereby enhancing the continued investment and activity in downtown. The enhanced amenities along the riverfront and improved urban design connections to the rest of downtown will realize the *Eugene Downtown Plan* vision for downtown as an active, strong urban core connected to the river.

Contribute to Envision Eugene Goals

The planned development helps the City meet many of the goals articulated in Envision Eugene:

- Promote compact urban development and efficient transportation options.
    - Integrate new development and redevelopment in the downtown, in key transit corridors and in core commercial areas.
    - Meet the 20-year multi-family housing need within the existing Urban Growth Boundary.
    - Make compact urban development easier in the downtown, on key transit corridors, and in core commercial areas.
- Provide housing affordable to all income levels.
- Protect, repair, and enhance neighborhood livability.
- Protect, restore, and enhance natural resources.

Environmental Health – Overall

Increase energy and materials use during construction period

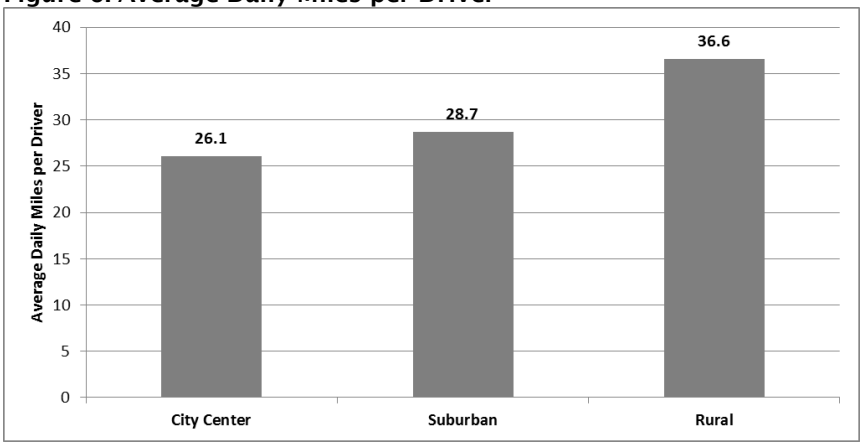
The construction of the infrastructure and new buildings will consume natural resources, including gravel, concrete, wood, steel, and other materials. The construction equipment will generate greenhouse gasses and other emissions. It is important to note that any new development will generate similar negative impacts, but because this area will be a centrally located, compact neighborhood, this development makes it likely that residents and businesses in the area will consume fewer resources over the long term.

Decrease average miles driven, carbon emissions, and other auto-oriented pollutants

A high priority action item within the *Eugene Climate and Energy Action Plan* is to increase density around the urban core and along high-capacity transit corridors. The Action Plan indicates that increasing the density of development around the urban center is an effective strategy for reducing fossil fuel use and greenhouse gas emissions. As a centrally located, compact neighborhood, the riverfront development will reduce average energy consumption over the long term.

National data show that individuals living in city centers drive, on average, fewer miles than individuals in other parts of a community. Figure 6 below shows that individuals drive 2.5 fewer miles per day than individuals in suburban parts of a community, and 10.5 fewer miles per day than individuals who live in rural areas.

Figure 6. Average Daily Miles per Driver



National Household Travel Survey, 2009, as reported in Transportation Energy Data Book, Figure 8.5 from Oak Ridge National Laboratory. July 2014.

Dense, mixed-use development near the downtown and University of Oregon will increase housing opportunities within close proximity to employment and retail services and cultural venues, decreasing average miles driven per Eugene resident. This will result in lower per capita carbon emissions and other automobile emissions (including carbon monoxide, nitrogen oxides, sulfur oxide, and particulate matter).

Reduce and treat stormwater runoff

The existing riparian river edge will be enhanced, providing significant habitat and ecological connectivity for a healthier environmental balance. To manage stormwater, the new park and landscaped areas will reduce the negative impacts of urban runoff typically associated with large volumes of untreated runoff and the release of harmful chemicals into waterways. To manage stormwater, the sidewalks will integrate green infrastructure.

The *EWEB Riverfront Master Plan* shows almost all (93%) of the redevelopment site in its current configuration is covered with impervious surfaces, creating 16.4 million gallons of stormwater runoff annually. Redeveloping the site will sustainably manage the property's storm water runoff through collection, retention and cleansing. The result will reduce runoff by an estimated 19% to 65% by conserving water for human use, ground water recharge, filtration and habitat creation. These stormwater enhancements will reduce the amount of impervious surface on the property and represent potential storm water management cost savings for the City.

Remediate industrial contamination

The site has been in industrial use for over 100 years. Environmental assessments found petroleum, arsenic, and polychlorinated biphenyl (PCBs) on site. The most contaminated areas have been remediated since 2015, but the site still has some contaminated soil. The Oregon Department of Environmental Quality (DEQ) has approved a Contaminated Media Management Plan (CMMP) as part of the letter of No Further Action (NFA), which provides direction for soils management during any ground-breaking activity. Contaminated soils will be managed to minimize exposure during the construction period and as it becomes occupied. Some contaminated soils may be moved offsite to an authorized disposal facility and the new buildings and roads will effectively cap the soil, limiting exposure to safe levels.

Create a compact urban form

Development on the Downtown Riverfront site will follow the *EWEB Riverfront Master Plan* and will be a dense, urban development. The compact urban form on the site will reduce pressure to build housing and commercial space on land elsewhere in the region. The compact urban form on the riverfront site will help preserve existing open space and agricultural lands, which helps the community achieve the Envision Eugene goal "Promote compact urban development and efficient transportation options."

Economic Prosperity – Overall

Create jobs and income during construction period

Constructing the residential and commercial structures will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that the residential and commercial construction will directly generate approximately 540 jobs with an average annual wage of $61,000. The construction activity will have ripple effects throughout the Lane County economy, generating an additional approximate 720 jobs with an average annual wage of $36,000. In total, the private investment in residential and commercial structures will generate an estimated 1,260 jobs.[5]

Constructing the streets network will also generate short-term jobs and associated income. Constructing the 8th and Hilyard crossing will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that the $15.45 million to construct the streets and other infrastructure will generate about 70 jobs with an average annual wage of $61,000. The construction activity will have ripple effects throughout the Lane County economy, generating an additional 70 jobs with an average annual wage of $42,000. In total, the streets and infrastructure construction will generate an estimated 140 jobs in Lane County.

[5] City staff used the IMPLAN model throughout this analysis to conduct the input-output analysis to estimate jobs and wages. The jobs are short-term jobs specifically associated with construction expenditures. Incomes are in 2015 dollars.

Create jobs and income during operations period

The WDA concept plan includes a small amount of commercial space, a restaurant, and a hotel. These commercial facilities will generate jobs and associated income. At this time, staff are unable to estimate the expected jobs and income.

Increase tax revenue

Please refer to Section 4 above for a description of the fiscal impacts to the City and the Agency.

Create cost efficiencies for urban services

Intensively developing land inside the Urban Growth Boundary will be more cost effective by reducing the need for constructing new infrastructure, and creating service cost efficiencies.

5.2 Riverfront Park

The City of Eugene is working to design and construct a 4-acre park along the edge of the Willamette River. The park includes greenspace along the river and an open plaza.

Social Equity – Park

Enhance residents' recreational opportunities

The Riverfront Park will provide a direct benefit to the community's residents, as it will create a public space to enjoy the Willamette River within the urban core. Based on visitation rates of the City's existing park system, Park Planners at the City of Eugene estimate that the new riverfront park will have at least 1,000 visits per day.

Economists have developed methods to quantify the economic value of the direct use of public space. In the City of Eugene, Earth Economics recently calculated that Eugene's parks and natural areas provide $21 million in recreational benefits each year.[6]

In Seattle, the Trust for Public Land conducted a survey to estimate the community's 'willingness to pay' for the recreation experience. That is, how much would the residents pay for similar experiences in commercial venues in the absence of public parks. The so-called 'direct use value' represents the amount of money residents save by not having to pay market rates to enjoy the parks. That study found that Seattle residents value general park use (such as playgrounds, trails, dog walking, and picnicking) at $1.95 per visit and they value special uses (such as fishing, kayaking, gardening, festivals, concerts, and attractions) at $6.77 per visit.[7] These data show that residents place economic value on parks and the activities that occur within them and that specialized parks have particularly high value.

The presence of a new park in the riverfront site will create new value for Eugene's residents: It will be a new venue for general park use and a new specialized riverfront facility. To estimate the economic value to Eugenians, staff can apply a mid-range value from the Seattle study to the estimated 1,000 daily visits to the new park. If staff use $3 per visit, the economic value of the new park equals $1.1 million per year.

Improve access to Willamette River

The Willamette River is a hugely important amenity in the community and the park will create a new setting for viewing and accessing the river. Improved river access was one of the community's priorities

[6] Earth Economics. Nature's Value: An Economic View of Eugene's Parks, Natural Areas, and Urban Forest. For the City of Eugene, Parks and Open Space Division. 2015.

[7] Trust for Public Land. The Economic Benefits of Seattle's Park and Recreation System. March 2011.

identified in the *EWEB Riverfront Master Plan* process. The *Eugene Parks and Rec System Plan* also references better access to the Willamette as a specific goal to create more connections to and through parks and natural areas throughout the city. New roads into the site and the rebuilt bike path will provide the entire community significantly improved routes to the park and riverbank.

Contribute to community cohesion

Social gathering spaces, such as parks, schools, and churches, contribute to community cohesion. The institutions and places that make up the network of human relationships can make a neighborhood stronger, safer, and more successful. Parks offer opportunities for all ages and income levels in a community to communicate, interact, and learn.[8] The Riverfront Park's central location and proximity to the downtown core will make it a public place where the whole community has an opportunity to interact. The plaza will provide physical spaces for community gatherings.

Positive effect on health

Greenspace positively affects emotional and physical well-being. There is research that measures the correlation between the risk of health problems to living near greenspace, and it has shown that living close to greenspace lowers the risk of heart disease, diabetes, chronic neck and back pain, asthma, migraines, depression and anxiety.[9] Parks provide opportunities for people to engage in physical activity, which has been shown to lower claims against medical insurance and health care costs.[10]

Environmental Health – Park

Increase energy and materials use during construction period

The construction of the park infrastructure will consume natural resources, including gravel, concrete, and other materials. The construction equipment will generate greenhouse gasses and other emissions while it operates.

Reduce and treat stormwater runoff

Pervious surfaces and trees in parks can help infiltrate stormwater, thereby reducing stormwater management costs. This keeps it from entering the municipal stormwater system, which can reduce capital investments in stormwater infrastructure and operation and maintenance costs for the city. A 2007 study in Portland found that an average tree in an urban park in Portland processes 226 gallons of stormwater annually, providing the city $6 in avoided stormwater management costs each year.[11] It is important to note that, in its current condition, the property is dominated by impervious surfaces and has no trees.

Reduce energy consumption

Trees influence the demand for energy at a local level, providing nearby structures shade in the summer and reducing the urban heat island effect.[12] This effect can reduce energy demand, which in turn lowers utility costs, improves air quality, and contributes fewer carbon emissions to the atmosphere.[13] A 2007

[8] Trust for Public Land. The Economic Benefits of Seattle's Park and Recreation System. March 2011.
[9] Maas, J., R.A. Verheij, P.P. Groenewegen, et al. "Green Space, Urbanity, and Health: How Strong is the Relation?" *Journal of Epidemiology and Community Health* 60 (2006): 587-592.
[10] Gies, E. *The Health Benefits of Parks.* The Trust for Public Land. 2006.
[11] Portland Parks and Recreation. Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation. October. 2007.
[12] Earth Economics. Nature's Value: An Economic View of Eugene's Parks, Natural Areas, and Urban Forest. For the City of Eugene, Parks and Open Space Division.
[13] Simpson, J.R. "Improved Estimates of Tree-Shade Effects on Residential Energy Use." *Energy and Buildings* 34 (2002): 1067-1076.

report in Portland found that an average street tree in Portland reduces the demand for electricity and natural gas, providing property owners about $3 in energy savings each year.[14] While the average park tree may not affect the energy demand for structures adjacent to a park, those that are positioned similar to street trees may provide similar benefits.

Enhance habitat in riparian area

The park will be developed along the edge of the Willamette River and it will be designed to improve the natural function of the riparian edge. Riparian areas support a wide variety of plants and wildlife, and the planned improvements will increase the health of the area.

Positive effect on air quality

The trees and other vegetation in the park will positively contribute to air quality in the region. Trees, in particular, capture gaseous air pollution and particulate matter. For example, a 2007 study of the value of parks in Portland found that trees in parks throughout Portland remove on average 462,662 pounds of air pollutants annually, providing benefits of more than $500,000 per year in reduced healthcare costs.[15]

Economic Prosperity – Park

Increase costs for security and maintenance

A new 4-acre park will add to the City of Eugene's park inventory, which will increase the costs for operations and maintenance. The new park will also require public safety patrols to ensure it is a safe and inviting space for the community. EWEB has committed $750,000 over a ten-year period to support operations and maintenance, but the park will be the City's responsibility in the long term.

Create jobs and income during construction period

Constructing the park will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that $10 million in parks construction activity (which is consistent with current estimates for the cost of constructing the Riverfront Park and Plaza) generates about 60 jobs with an average annual wage of $60,000. The construction activity will have ripple effects throughout the Lane County economy, generating an additional 50 jobs with an average annual wage of $40,000. In total, the parks construction will generate approximately 110 jobs in Lane County.

Increase property values

A well-designed park creates a desirable space, and some households are willing to pay a premium to live near that park. An extensive literature review of the impact parks have on property values concluded that most studies conducted over the past four decades found that parks increase the value of property near those parks.[16]

Studies that focused on parks in city centers found that parks have a greater positive impact on nearby properties than parks in more suburban landscapes. A study in the Minneapolis-St. Paul metropolitan area found that the benefit of being close to a park is higher for residences closer to the central business

[14] Portland Parks and Recreation. Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation. October. 2007.
[15] Portland Parks and Recreation. Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation. October. 2007.
[16] Crompton, J.L. 2001. "The Impact of Parks on Property Values: A Review of the Empirical Evidence." *Journal of Leisure Research* 33(1): 1-31.

district.[17] One study showed that residents were willing to pay a premium of 15% for homes or apartments nearby a neighborhood park, and an additional 2% if the home also had a view of the park.[18]

These results indicate that a public park in the riverfront site will enhance property values. Developing the park before private development begins will create higher assessed values for the structures than if they were built before the park. This will increase property tax revenue to the City and other affected taxing districts.

Enhance tourism and transient room tax revenues

The development on the riverfront site will contribute to the community's overall identity as a visitor destination in a positive way. While staff do not expect the park will be a tourist attraction, it will enhance the appeal of our area for tourism. The park's proximity to major athletic venues, including Autzen Stadium and Hayward Field make it an obvious destination for visitors attending athletic events. The improved access for all transportation modes will ensure that the park will attract the visitors before and after the athletic events, enhancing the visitor experience. To the degree that the Eugene area increases its appeal as a visitor destination, the increased visitor spending will have a positive economic impact on the area as visitors purchase accommodations, entertainment, food, and miscellaneous purchases. Increased visits will increase hotel revenue, which will in turn yield increased revenues from the Transient Room Tax.

5.3 Bike Path

The Ruth Bascom Bike Path provides bicycle and pedestrian access along the Willamette River. The path exists at this time, but will be rebuilt in coordination with the Riverfront Park, the 5th Avenue connection, and the 8th Avenue railroad crossing. The rebuilt path will create a strong bike/pedestrian connection between the riverfront site and the downtown core.

Social Equity – Bike Path

Improve connectivity and access to riverfront and downtown core

The bike path will improve connectivity between the existing bike path system and the new housing and commercial development at the riverfront site and the downtown core. The improved connectivity will lower the time required to reach the different locations on bike or foot. The improvement will enhance the experience of pedestrians and bicyclists and reduce their travel time. This will increase the likelihood that individuals will choose to make trips on foot or bicycle, instead of using a car.

Increase opportunities to improve health

An improved bike path connecting the riverfront site to other parts of the community will increase the opportunity for residents to use the bike path and increase their physical activity. By decreasing the use of autos and increasing the use of bicycles, the improved bike network will have positive impacts on community health.

Physical inactivity is a well-documented risk factor for many of the most common health problems facing Americans, including obesity, heart disease, stroke, some cancers, diabetes and depression. In a report that examined bicycle programs on federal lands, the Federal Highway Administration reported that it is

[17] Anderson, S.T. and S.E. West. 2006. "Open Space, Residential Property Values, and Spatial Context." *Regional Science and Urban Economics* 36(2006): 773-789.

[18] Jim, C.Y. and W.Y. Chen. 2010. "External Effects of Neighborhood Parks and Landscape Elements on High-Rise Residential Value." *Land Use Policy* 27 (2010): 662-670.

estimated that 67% of U.S. adults age 20 years and over are overweight or obese and bicycling can be a good way to engage in regular physical activity.[19]

Environmental Health – Bike Path

Increase energy and materials use during construction period

The construction of the bike path will consume natural resources, including gravel and other materials. The construction equipment will generate greenhouse gasses and other emissions.

Decrease average miles driven, carbon emissions, and other auto-oriented pollutants

The bike path will improve connectivity and will increase the likelihood that individuals choose to make trips on foot or bicycle, instead of using a car, thereby reducing the number of miles driven by Eugene residents. This will result in lower per capita carbon emissions and other automobile emissions (including carbon monoxide, nitrogen oxides, sulfur oxide, and particulate matter).

Economic Prosperity – Bike Path

Create jobs and income during construction period

Constructing the bike path will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that for every $1 million in path construction activity generates about 5 jobs with an average annual wage of $61,000. The construction activity will have ripple effects throughout the Lane County economy, generating an additional 5 jobs with an average annual wage of $42,200. In total, every $1 million in path construction will generate approximately 10 jobs in Lane County.

Increase exposure to retail businesses

The bike path will connect to 5th Avenue and its associated commercial activity. It will also directly pass near commercial activity in the riverfront site, including the planned restaurant on the plaza. These commercial facilities stand to take advantage of pedestrians and bicyclists traveling along the path and choosing to stop at them. The existing bike path covers many miles, but very few retail services are directly available on the path. The riverfront site has the potential to be a destination for weekend and evening bicyclists, looking to combine a recreational ride with a meal along the Willamette River. A recent study conducted for the City of Eugene reviewed the potential economic impacts of proposed street-design change to South Willamette, making it more accessible to bicycles and pedestrians.[20] The study reported that bike and walk trips are associated with more frequent business patronage, but with smaller per-trip expenditures. A survey in the Portland metropolitan area found that cyclists spent more than drivers at restaurants, drinking establishments, and convenience stores, but motorists spent more than cyclists at supermarkets.[21] These data indicate that retail goods and services in the riverfront site will benefit from the proximity of the bike path.

---

[19] Gleason, Rebecca and Laurie Miskimins. *Exploring Bicycle Options for Federal Lands: Bike Sharing, Rentals and Employee Fleets*. Federal Highway Administration, Western Federal Lands Highway Division, Western Transportation Institute. FHWA-WFL/TD-12-001. January 2012.

[20] ECONorthwest. "South Willamette Street Redesign: Economic Literature Review" memorandum for the City of Eugene, February 28, 2014.

[21] Clifton, Kelly at al. "Consumer Behavior and Travel Mode Choices" Oregon Transportation Research and Education Consortium. 2013. As cited in ECONorthwest. "South Willamette Street Redesign: Economic Literature Review" memorandum for the City of Eugene, February 28, 2014.

5.4 Quiet Zone

The purpose of the Quiet Zone (QZ) is to eliminate the routine sounding of train horns at 10 downtown railroad crossings to increase neighborhood livability and downtown redevelopment potential, including at the Downtown Riverfront site. In the absence of a QZ, the Federal Railroad Administration (FRA) has the following requirements:

- Train horns must be sound 15 to seconds prior to and until a train reaches a crossing.
- The horn should not be sounded greater than a quarter-mile in advance of a grade crossing.
- The minimum sound level of the horn is 96 decibels (dBA), 100 feet in front of the train in its direction of travel.
- The maximum sound level is 110 dBA.

For context, audible communication usually ceases when background noise exceeds 90 dBA.

City Council and the Agency Board approved the crossing standards May 10, 2017 and funding sources on February 26, 2018 that are included in the FY19 Proposed Budget. The 10 railroad crossings that need to be altered in some way to meet the FRA's QZ requirements before the FRA will allow a QZ in the area are:

- **8th Avenue Crossing.** Add center-line medians on both sides of the railroad crossing, construct a roundabout on EWEB's property. The roundabout will provide access to both the Downtown Riverfront property and the University of Oregon property while maintaining the needed separation from the railroad crossing.
- **High Street Crossing.** High Street is a major collector street at the railroad crossing. Install an additional two crossing gates to create a quad-gate crossing system to fully close the crossing during the time a train occupies the crossing.
- **Pearl Street Crossing.** Pearl Street is a major collector street at the railroad crossing. Install an additional two crossing gates to create a quad-gate crossing system and a pedestrian gate to fully close the crossing during the time a train occupies the crossing.
- **Remaining 7 RR Crossings.** The safety measures at the remaining crossings include a mix of supplemental safety measures.

Social Equity – QZ

Increase safety at railroad crossings

To establish a QZ, railroad crossings must have supplemental safety measures (SSMs). The SSMs include constructing medians, installing quad gates, or converting streets to one-way traffice to preclude motorists from entering a rail crossing when a train is about to occupy the crossing. The supplemental safety measures at the crossings will maintain the safety of the crossing while allowing the silencing of the routine train horns.

Improve access to riverfront site

Reconstructing the 8th Avenue crossing to improve the connection of the Downtown Riverfront site to the existing street system will greatly improve access to the Willamette River and the proposed public park. The reconstructed crossing will include a roundabout that will allow access to both the Downtown Riverfront property and the University of Oregon property and will enhance the connectivity of the riverfront to downtown for bicyclists and pedestrians. The 8th Avenue crossing is one part of an expanded road system, and it will create new connection to the River in the urban core. All members of the community will experience improved access to the whole site, the new public park, and the river.

Diminish noise

Implementing a QZ will reduce noise levels throughout the community. The FRA has modeled how train horn sound dissipates from its source. The model shows that speech interference can begin to occur approximately 7,000 feet (1.3 miles) from the track when the train horn is sounding. People, outside and closer than 1,500 feet from the track, may have to shout to be heard.[22]

Improve health

Reducing the noise level will positively impact individuals who work or live within the impacted area. Some effects identified by researches include decreased performance on cognitive tasks, hearing loss, speech interference, and sleep disturbance. Research has also shown that negative cardiovascular effects are associated with long-term exposure to daily equivalent sound levels greater than 65 dBA and transportation noise is believed to accelerate and intensify the development of latent mental disorders.[23]

Environmental Health – QZ

Increased energy and materials use during construction period

The construction of the infrastructure will consume natural resources, including concrete, steel, and other materials. The construction equipment will generate greenhouse gasses and other emissions while it operates.

Implement management of contaminated MGP site

The planned roundabout to the east of the 8th Avenue crossing is designed to lie on top of a highly contaminated area known as the "MGP site". The land is owned by EWEB and is not part of the redevelopment site land purchased by the Agency. It was once the site of a manufactured gas plant (MGP) and that industrial activity left contamination in the soil. DEQ has approved a management plan for the site that involves capping the soil, so that the contamination does not migrate and humans and animals are not exposed to it. The road infrastructure that makes up the roundabout may be constructed over the cap. The site will be capped, and incorporating it into the planned road infrastructure allows it to become a useful part of the area's transportation infrastructure.

Economic Prosperity – QZ

Create jobs and income during construction period

Constructing the crossing will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that the $3.7 million to construct the Quiet Zone infrastructure will generate about 15 jobs with an average annual wage of $61,000. The construction activity will have ripple effects throughout the Lane County economy, approximately generating an additional 20 jobs with an average annual wage of $42,000. In total, the Quiet Zone construction will generate about 35 jobs in Lane County.

Provide essential access to riverfront site

Reconstruction of the 8th Avenue crossing so that the Downtown Riverfront site is connected to the existing street system is essential to the success of the development project. Without improved access, the

[22] Redden, John W.P., P.E. "Is Train Horn Noise a Problem in Your Town" *APWA Reporter*. September 2005.

[23] Lee, Cynthia S.Y. and Gregg G. Fleming. *General Health Effects of Transportation Noise*. US Department of Transportation, Research and Special Programs Administration, John A. Volpe National Transportation Systems Center. June 2002.

site cannot become an integrated part of the city and its urban core and development of the full site cannot occur.

Reduce construction costs of development

In the absence of a QZ, there is evidence that development may not occur on the Downtown Riverfront site. For example, the U.S. Department of Housing and Urban Development (HUD) may not allow the use of its funds for affordable housing. As part of the environmental review required by HUD to use Community Development Block Grant (CDBG) funds, the City has to identify areas of 'problem' noise. Anything over 65 dBA is considered a problem and must be mitigated. For sound levels exceeding 75 dBA, HUD encourages the developer to seek a different location. Sound mitigation efforts include triple-glazed windows and thicker walls. These mitigation efforts create higher construction costs, and the costs can increase so much that rents cannot cover them. Affordable housing is unlikely to be financially feasible on this site without improvements associated with the QZ.

Mitigation costs may be an issue for other development types, including market-rate housing and commercial structures. To mitigate the high level of sound, the construction costs will increase. It is likely that rents in the Eugene market will not be able to be high enough so that the rent covers the higher construction costs. The increased costs of noise mitigation will make development financially infeasible. The lack of high-decibel train horns will eliminate need for highly sound-resistant windows and walls, thereby lowering constructions costs.

5.5 Enhanced Pedestrian Environment

The WDA concept plan for redevelopment includes an enhanced pedestrian environment that connects site the Downtown Riverfront area to 5th Avenue and 8th Avenue. The sidewalks will include enhanced pedestrian features and green infrastructure, so that the overall development offers a high quality urban experience. Viaduct open space is to be developed by WDA as a public amenity – privately owned but open to the public. The ultimate use is not finalized but some type of athletic courts or a dog park have been discussed.

Social Equity – Pedestrian Environment

Enhance the public experience

The enhancements to basic transportation infrastructure will make the area more visually appealing and make it a desirable location. Because the sidewalks, roads, and surrounding landscaping are in the open, all members of the community will enjoy the higher quality infrastructure. In addition, the wider sidewalks will make it easier to navigate the area for individuals with impaired mobility.

Positive effect on health

The enhancements are expected to include small greenspaces with natural landscaping. Greenspace positively affects emotional and physical well-being. There is research that measures the correlation between the risk of health problems to living near green space, and it has shown that living close to greenspace lowers the risk of heart disease, diabetes, chronic neck and back pain, asthma, migraines, depression and anxiety.[24]

[24] Maas, J., R.A. Verheij, P.P. Groenewegen, et al. "Green Space, Urbanity, and Health: How Strong is the Relation?" *Journal of Epidemiology and Community Health* 60 (2006): 587-592.

Environmental Health – Pedestrian Environment

Reduce and treat stormwater runoff

The landscaping throughout the Downtown Riverfront site will be designed to reduce stormwater runoff and filter runoff through bioswales. These stormwater enhancements will reduce the amount of impervious surface on the property and represent potential stormwater management cost savings for the City. The existing site has a total of 16.4 million gallons of stormwater runoff annually, and the greenspace in combination with the park will reduce runoff by an estimated 19% to 65%.

Reduce energy consumption

Trees influence the demand for energy at a local level, providing nearby structures shade in the summer and a barrier to wind in the winter. Both effects can reduce energy demand, which in turn lowers utility costs, improves air quality, and contributes fewer carbon emissions to the atmosphere. The effectiveness of a tree to reduce energy consumption depends on its proximity and position relative to a structure. Trees nearby structures on south-facing exposures typically provide greater levels of benefits than trees more distant from structures, or on north-facing exposures.[25] A 2007 report in Portland found that an average street tree in Portland reduces the demand for electricity and natural gas, providing property owners about $3 in energy savings each year.[26]

Positive effect on air quality

The trees and other vegetation in the landscaped areas will positively contribute to air quality in the region. Trees, in particular, capture gaseous air pollution and particulate matter. For example, a 2007 study of the value of parks in Portland found that trees in parks throughout Portland remove on average 462,662 pounds of air pollutants annually, providing benefits of more than $500,000 per year in reduced healthcare costs.[27]

Economic Prosperity – Pedestrian Environment

Enhance financial viability

The enhanced public infrastructure will create a sense of place that makes the riverfront site a desirable location. The more desirable the site becomes, the more likely that the development will be financially successful and achieve full buildout.

5.6 Historic Preservation of Steam Plant

The Downtown Riverfront site includes the former Steam Plant, although it is not part of the WDA redevelopment. At this time, the UR Agency is seeking to transfer ownership and/or site control to a private party through a public process. The Agency issued a Request for Qualifications in May 2018 and hopes to identify a private party willing to repurpose the structure into an active use that complements the WDA redevelopment and Riverfront Park.

At this time, no public dollars have been committed to the Steam Plant.

[25] Simpson, J.R. "Improved Estimates of Tree-Shade Effects on Residential Energy Use." *Energy and Buildings* 34 (2002): 1067-1076.

[26] Portland Parks and Recreation. 2007. Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation. October.

[27] Portland Parks and Recreation. 2007. Portland's Urban Forest Canopy: Assessment and Public Tree Evaluation. October.

Social Equity – Steam Plant

Enhance cultural identity

Adaptive reuse of the historic Steam Plant will preserve an important part of Eugene's past. Built structures are a tangible representation of history in a place. By preserving the historic structure, the community is able to share the spaces in which earlier generations lived and worked. Older structures are part of a community's history and preserving them enhances the City's cultural identity.

Environmental Health – Steam Plant

Conserve existing resources

Restoration and redevelopment may consume less energy than demolition and new construction, and preservation continues to use the value of past energy investment. Demolition and new construction not only consume present-day energy, but negates and wastes the past energy investment made in a building.

Economic Prosperity – Steam Plant

Cost of rehabilitation may exceed economic value of the structures

The full cost of rehabilitating the Steam Plant is not known. It is possible, however, that the cost of rehabilitation will exceed the economic value of the structures. The true value of rehabilitation is how the cultural value of the older structures enhance the overall Downtown Riverfront site and help to make the place a unique part of the community.

5.7 Affordable Housing

In Eugene, many individuals and families struggle to find housing they can afford. Approximately 60% of Eugene households pay more than 30% of their income on housing.[28] The City of Eugene works to create a range of stable, safe, and affordable housing opportunities for area residents. Eugene programs provide financial and regulatory incentives for the development of permanent, transitional and emergency housing developed by partner organizations.

The WDA concept plan includes a site for an affordable housing development. WDA will not purchase that portion of the site, instead the Agency would transfer the land to a qualified affordable housing developer.

At this time, the Agency has not identified expected costs for affordable housing. Potential funding sources include:

- Federal Low Income Housing Tax Credits
- State of Oregon Tax Credits
- Riverfront Urban Renewal
- HUD's HOME Investment Partnerships Program funds
- HUD's CDBG funds
- System Development Charge waivers
- Low Income Rental Housing Property Tax Exemption (LIRHPTE)

[28] U.S. Census Bureau. American Community Survey, 2007-2011.

Social Equity – Affordable Housing

Increase location choices for low-income households

Current residents of affordable housing in the community have indicated that they have diverse preferences about housing locations.[29] Affordable housing in the riverfront site will create opportunities for low-income households to live within walking distance to the Willamette River, the downtown core, Lane Community College, and the University of Oregon. The site will offer proximity to employment centers, retail goods and services, views of the river, and recreational activities that are not currently available in Eugene.

Reduce dependency on automobiles

Housing in the Downtown Riverfront site will provide households the opportunity to live close to two major employment centers and a range of goods, services, educational, recreational, and cultural opportunities. Households living in existing affordable housing developments in the downtown core—the Aurora and West Town on 8th—rely on automobiles much less than households living in other parts of the community. Two-thirds of commuters living in downtown affordable housing projects travel by bus, bike or walk, a significantly higher portion than 20% of all commuters in Eugene.[30] Proximity to major employment centers and transit hubs is particularly valuable to low-income households. If they can get to work (and other activities) without a car, they may choose to not own a car, eliminating the cost of car ownership.

Reduce commute times

Housing in the urban core reduces average commute times for its residents. Across Eugene, 20% of commuters have a commute time of less than 10 minutes, but 25% of commuters in existing downtown affordable projects have a commute time of less than 10 minutes.[31]

Provide access to goods and services

Many forms of federal and state funding for affordable housing require access to key facilities, such as a grocery store. New affordable housing on the Riverfront site will have convenient access to the farmers market and grocery stores. In addition, the new development is close to LCC's downtown campus, recreational possibilities at the new riverfront park, and good access to the bike path. A 2014 study initiated by the Lane Livability Consortium assessed the issues of access, equity, and opportunity of affordable housing residents. The study found that many affordable housing residents experience a lack of access to nutritious food and safe places to exercise.[32] New affordable housing in the riverfront site will provide increased opportunity to for its residents to address those issues.

---

[29] St. Vincent de Paul Society of Lane County, Inc., Housing and Community Services Agency of Lane County, and Metropolitan Affordable Housing Corporation. *Assessment of Equity and Opportunity for Affordable Housing Residents*. For Livability Lane. January 2014.

[30] City of Eugene, Planning and Development Department. *Sustainability and Affordable Housing*. June 2007. To show the different impacts, staff used previously existing affordable developments in the City of Eugene. The two developments that most closely resemble the expected development in the riverfront site are the Aurora building (at 11th Avenue and Oak) and West Town on 8th (on 8th Avenue between Charnelton and Lincoln). The Aurora building has the highest density, at 245 units per acre and West Town has 107 units per acre. To show the impacts, staff average the numbers that describe these two buildings.

[31] City of Eugene, Planning and Development Department. *Sustainability and Affordable Housing*. June 2007.

[32] St. Vincent de Paul Society of Lane County, Inc., Housing and Community Services Agency of Lane County, and Metropolitan Affordable Housing Corporation. *Assessment of Equity and Opportunity for Affordable Housing Residents*. For Livability Lane. January 2014.

Improved standard of living positively affects health

Quality affordable housing creates positive health outcomes for many reasons. Low quality housing has problems which negatively affect health, such as lead paint, mold and mildew, cockroach infestations, and other factors. In addition, poor quality housing (and uncertainty regarding housing options) can impact mental health conditions. High housing costs can lead to budget trade-offs that shortchange health care.[33] Affordable housing also helps low-income individuals escape domestic violence.[34]

Environmental Health – Affordable Housing

Increase energy and materials use during construction period

The construction of new buildings will consume natural resources, such as wood, steel, and other materials. The construction equipment will generate greenhouse gasses and other emissions.

Decrease average miles driven, carbon emissions, and other auto-oriented pollutants

As described in Section 5.1 (impacts of the Overall Development of the Site), dense, mixed-use development near the downtown and University of Oregon will increase housing opportunities within close proximity to employment and retail services, decreasing average miles driven per Eugene resident, and associated automobile emissions and carbon footprint.

Economic Prosperity – Affordable Housing

Create jobs and income during construction period

Constructing new affordable housing will generate short-term jobs and associated income. Using an input-output model to estimate the number of jobs and income impacts associated with construction expenditures, City staff found that every $1 million in multi-family residential construction activity generates about 5 jobs with an average annual wage of $61,000. The construction activity will have ripple effects throughout the Lane County economy, approximately generating an additional 10 jobs with an average annual wage of $46,000. In total, every $1 million in multi-family residential construction will generate about 15 jobs in Lane County.

Increase consumption spending

Reducing housing costs for low-income households directly increases consumption spending for those households. The household income is so low that they typically do not direct the funds into savings; the savings from reduced housing costs are immediately spent on other basic items.

Varying impact on property values

Academic research has measured the impact new affordable housing developments have on values of surrounding property, but the research has found that impacts differ across programs and circumstances. A review of previous studies found that affordable housing can have a negative effect on nearby property values, but design and management of the affordable housing can limit that impact.[35] The empirical

[33] Mueller, E.J., and J.R. Tighe.. "Making the Case for Affordable Housing: Connecting Housing with Health and Education Outcomes." *Journal of Planning Literature* 21 (371). 2007.

[34] Martin, E.J. and N.S. Stern. "Domestic Violence and Public and Subsidized Housing: Addressing the Needs of Battered Tenants through Local Housing Policy." *Journal of Poverty Law and Policy*. January-February 2005.

[35] Nguyen, M.T. "Does Affordable Housing Detrimentally Affect Property Values? A Review of the Literature." Journal of Planning Literature 20 (15). 2005.

evidence indicates that five key factors influence the effect affordable housing has on nearby property values.[36]

- The physical appearance of affordable housing can affect the appeal of a community. Unattractive or unkempt buildings may harm a community, while attractive and well-maintained buildings may enhance a community.
- The development of affordable housing may signal to developers an area is viable and attract additional investment.
- New housing will lead to increased population. An increase in population can make local streets safer and promote commercial activity.
- Affordable housing may lead to a more stable population, since residents of subsidized housing tend to live in units for longer periods of time.
- Affordable housing often replaces abandoned buildings or vacant lots. This can make neighborhoods safer and more attractive. On the other hand, subsidized housing could replace a desirable use, such as a park or open space.

This research indicates that by carefully selecting the locating and incorporating good project design, affordable housing can have a positive impact on nearby property values. The existing affordable projects in downtown Eugene have enhanced the overall viability of development in downtown. The projects are visually appealing and have brought residents to the area. If the affordable housing development in the Downtown Riverfront site is similar in quality to the recent downtown projects, it should positively impact nearby property values. t

[36] Schwartz, Ellen, Voicu, and Schill. Cited by Ellen, I.G. "Spillovers and Subsidized Housing: The Impact of Subsidized Rental Housing on Neighborhoods." Joint Center for Housing Studies, Harvard University. RR07-3. March. 2007.